

PLANETARY PROTECTION ISSUES FOR MARS SAMPLE ACQUISITION FLIGHT PROJECTS

J. Barengoltz

Jet Propulsion Laboratory, California Institute of Technology

jack.b.barengoltz@jpl.nasa.gov/Fax: 818-354-0998

The planned NASA sample acquisition flight missions to Mars pose several interesting planetary protection issues. In addition to the usual forward contamination procedures for the adequate protection of Mars for the sake of *future* missions, there are reasons to ensure that the *sample* is not contaminated by terrestrial microbes from the acquisition mission. Recent recommendations by the Space Studies Board, National Research Council, would indicate that the scientific integrity of the sample is a planetary protection concern. Also, as a practical matter, a contaminated sample would interfere with the process for its release from quarantine after return for distribution to the interested scientists. These matters will be discussed in terms of the first planned acquisition mission.

Jack B. Barengoltz, Ph.D.

Mail Stop 158-103

Jet Propulsion Laboratory

4800 Oak Grove Drive

Pasadena, California 91109

US

Tel: 818-354-2516

Fax: 818-354-0998

F3.4 Evolving planetary Protection Policy for Extraterrestrial Sample Return

Michael A. Meyer

no special equipment required

Oral preferred

no financial support requested